



SWEDISH

Telehealth

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Director of Telehealth

Types of Technology



Types of Telemedicine Services

- ***Interactive Services***

- Real-time consultation between patient and provider via videoconferencing +/- DICOM image review

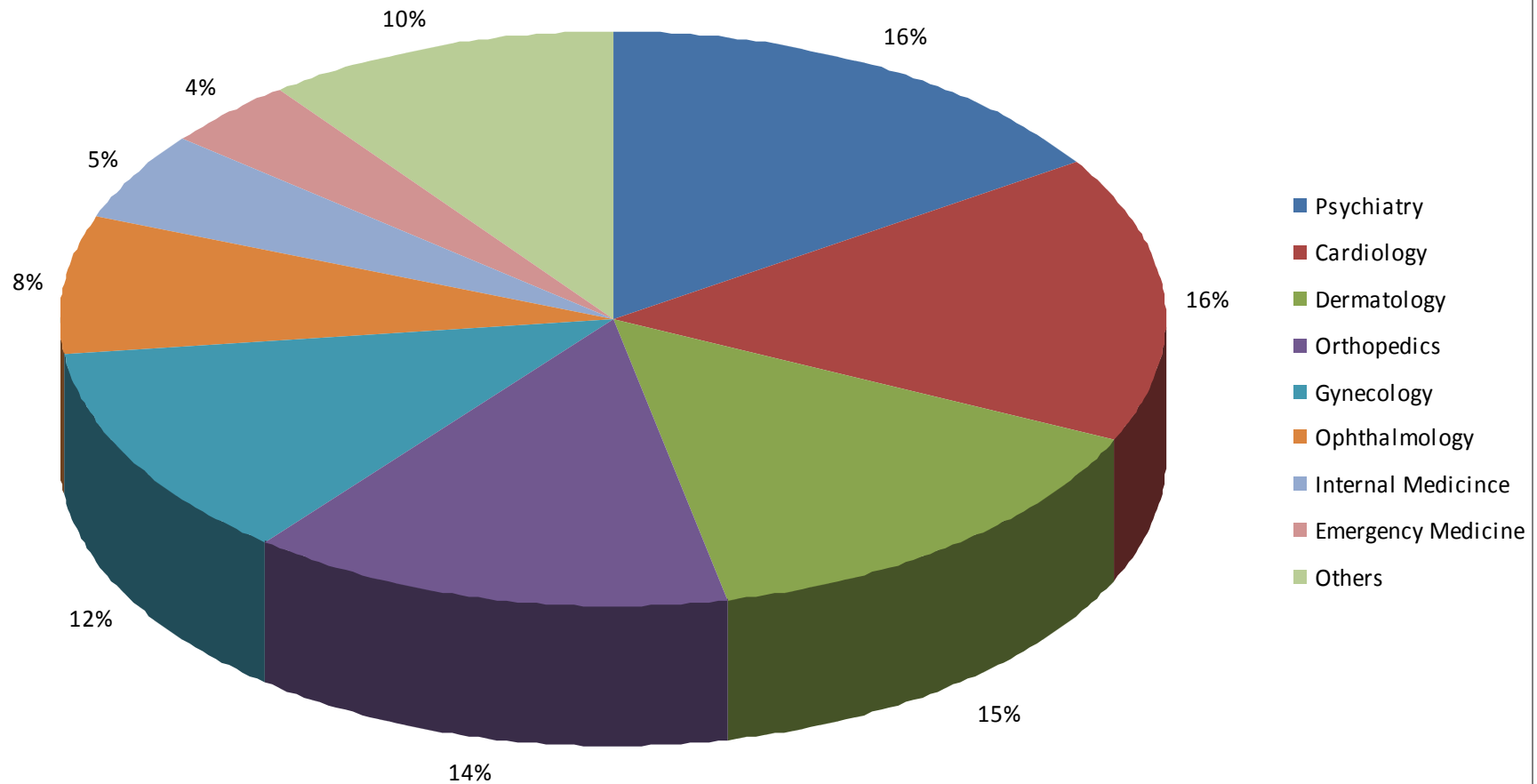
- ***Store and Forward***

- Acquiring and forwarding data to practitioner for later assessment (models include dermatology, radiology, pathology)

- ***Remote Monitoring***

- Monitoring patients remotely, with or without video

Telemedicine Market by Specialty



Store and Forward vs. Real Time

Connectivity issues, scheduling challenges, and enhanced image quality drive store & forward usage

Clinical needs for real-time consultation and reimbursements make real-time a more viable option

Store & Forward telemedicine

- Asynchronous interaction
- Documents and images
- Electronic medical records
- Patient education

Remote consultation

- Face-to-face interaction
- Immediate feedback

Real time telemedicine

Potential growth areas for store and forward



Clinical specialties for telemedicine

- Radiology
- Dermatology
- Pathology
- Oncology
- Ophthalmology
- Dental

Depending on the procedure, either real-time or store & forward can be used



- Cardiology
- ENT
- GI
- Pulmonary
- Rheumatology



Must use real time



- Psychology/ Psychiatry
- Neurology
- Speech therapy
- Physical therapy

Liability and Malpractice

- ¹ Telestroke, using videoteleconferencing (VTC) 1st named 1999
- ² Telestroke reports demonstrate good functional outcome and mortality when compared to conventionally treated patients
- ³ Correct treatment decisions more common via telemedicine (vs. telephone)
 - 98% vs. 82%
 - $P = 0.009$
- ⁴ No difference in IV alteplase treatment rates

1. Levine & Gorman, "Telestroke": the application of telemedicine for stroke, Stroke, 1999.
2. Amarenco et al., Telemedicine for improving emergent management of acute cerebrovascular syndromes. Int J Stroke, 2007.
3. Schwab, S et al., Long-term outcome after thrombolysis in telemedical stroke care. Neurology, 2007.
4. Meyer, B et al., Efficacy of site-independent telemedicine in the STRoke DOC trial: a randomized, blinded, prospective study. Lancet, 2008.

Liability and Malpractice

- Patients are informed consumers and expect this service
- American College of Emergency Physicians
 - “IV alteplase may be an efficacious therapy for the management of acute ischemic stroke if properly used incorporating the guidelines established by the NINDS”
- ¹ Most litigation (88%) regarding alteplase treatment is related to failure to treat
 - Emergency Physicians are the most common defendants
 - Plaintiff favorable cases:
 - 83%: failure to treat
 - 17%: injury claimed from treatment

Questions

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